KES

Gauge Block Comparator
Precision Check Standard

KES Q – B235

(EST.) 1989 – 10 – 31

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1. Purpose

This shall be for interpret gauge block precisely and sustain precision of gauge block by keeping precision of comparator by standardizing management of gauge block comparator. (Hereinafter, this shall be comparator.)

2. Scope of Application

This shall be applied to gauge block comparator comparing and measuring gauge block satisfying ISO correction standard in charge of our company.

3. Inner Structure and Theory

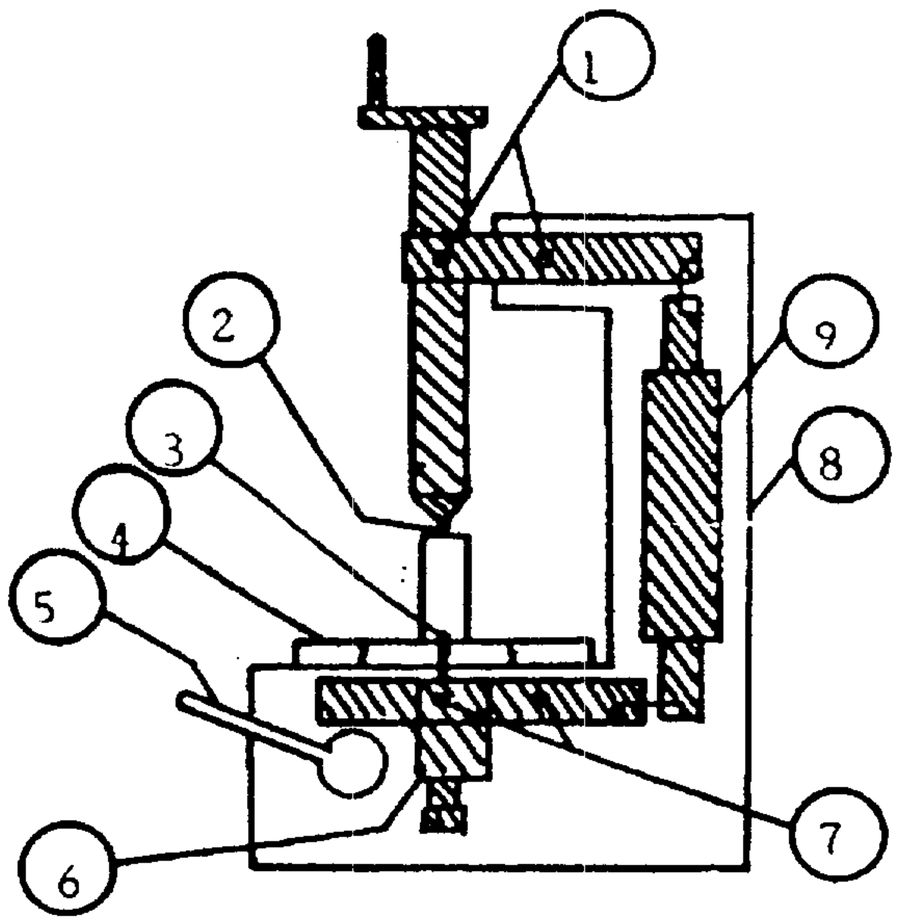
Gauge head shall be spindle operated by hole of 0.078" (2 mm) in platen and pivoted under caliper.

Reference contact can be adjusted finely and balanced for controlling measurement force. Platen shall support weight of gauge block for measurement and gauge block weight and main structural deformation shall not influence measurement accuracy.

Lifting lever operated by cam shall have the operation of lifting reference contact. (Refer to figure 1.)

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① Pivot

② Reference contact

③ Sensitive contact

④ Platen

⑤ Lifting lever

⑥ Gauge head

⑦ Pivots

⑧ Main structure

⑨ Counter balance

Fig. 1

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4. Appearance Name and Function

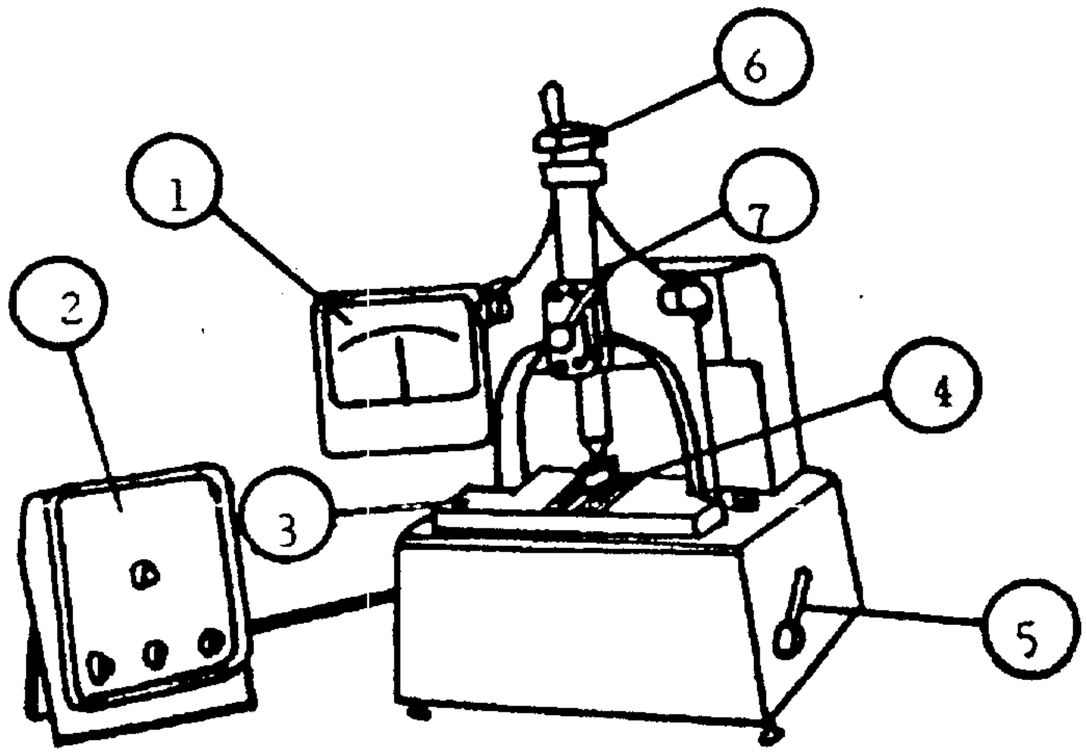


Fig. 2

① The meter

Meter shall have a scale of 0.02 μm with ± 1 μm.

Glass line behind meter indicator shall prevent mistake by view error.

Meter can be rotated by position of measurer.

② The amplifier

Amplifier shall be two types of ±1 μm and ± 10 μm from 0.02 μm.

Electric zero adjustment shall be possible from any point of high magnification.

③ The platen

Chrome-gilded platen shall be made of light steel.

Platen shall support block for measurement and guard from swing from measurement position.

④ Gauge head

Gauge head spindle sensitive contact shall make it contact with block with hole in platen.

Gauge head including sensitive contact and reference spindle shall be main structure of comparator measuring contact with high sensitivity.

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